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ABSTRACT

Enrollment projections for Montgomery College (MC) during the fiscal years 1981 through 1985 are outlined and graphically illustrated in this report. Chapter I details the methodology of the projection analysis, in which varying enrollment predictions, based on alternative assumptions, are matched with the projections derived from a curve-fitting technique in order to provide the most likely picture of future trends. Chapter II presents the results of this process and the data sources for the following segments of MC enrollment: high school graduates, out-of-county and out-of-state residents, returning matriculated students, older county residents, and off-campus or extension students. Chapter III provides a composite of the values for each segment and a comparison of the college's anticipated growth with county population projections. Chapter IV outlines the fiscal year credit enrollments by campus, semester, and day/evening attendance. Chapters V through VII present full- and part-time enrollments, credit and non-credit enrollments, and a summary of full-time equivalent enrollments. Assumptions determined in the analysis include a no-growth yield rate for graduates of most area high schools, increases in the number of high school graduates delaying entrance into college, and increases in the enrollment rate of adults, returning matriculated students, and out-of-county residents. (JP)

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FIVE-YEAR ENROLLMENT PROJECTIONS

FISCAL YEARS 1981 - 1985

(A Supplement to the FY 1981 Capital
and Operating Budgets of
Montgomery Community College)

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by

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MONTGOMERY COLLEGE

Montgomery County, Maryland

November 1979

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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CHAPTER I

INTRODUCTION AND FRAMEWORK

A. Introduction

With more than a hundred thousand former students and graduates, and many more thousands of students currently enrolled in credit and non-credit courses, Montgomery College has become a major public institution in what is perhaps the most educationally conscious county in the United States. The College has established an outstanding record of education for the citizens of the County. Students range from teenagers who have just graduated from high school to senior citizens who are pursuing their particular interests in higher education. The educational opportunities available at the College are flexible and designed to meet the varied needs of both the individual and the community. These opportunities range from preparation for transfer to a baccalaureate college for advanced degrees to the development of skills for immediate employment, for the upgrading of current skills and for the fulfillment of other personal goals that contribute to making life more stimulating and productive.

To meet these needs, the College is continually evolving and developing, considering what new elements to introduce and what existing ones to modify or to discontinue. New courses and curriculums are introduced to meet new educational needs, and existing courses and curriculums are revised or deleted to reflect current requirements. To support its planning for curriculum and facilities, the College requires an effective process for projecting enrollment a number of years into the future.

In 1974 Montgomery College developed and implemented a statistical enrollment projection model. This model provided single figure best estimates of predicted enrollments for each of a number of enrollment segments (campuses, semesters, etc.) for a ten year period. Since 1974 the model has been refined and modified as need has arisen. This single figure enrollment estimate model has been a useful planning tool for the College during a period of growth and expansion. In recent years, however, enrollment growth has slowed, resources have become tighter, and, as a result, a necessity for more controlled staffing and budgeting has emerged. These changes suggest the need for reevaluation of the enrollment projection methodology to allow the College to plan for possible ranges of enrollment. Enrollment planning must provide answers to questions such as these: What is the lowest enrollment that the College might reasonably expect in a given year? What is the highest? What is the best estimate of potential enrollment? What are the assumptions that must be met to achieve the low, medium or high estimates?

Everyone knows that it is impossible to predict the future with complete certainty. In the years of enrollment growth, if the

College achieved an enrollment that was three or four percent over or under projections, the effects were not severe, since there was always some growth to support the College's budget. At the current time, however, when enrollments are stabilizing and resources are not as readily available, the effects of enrollment shortfalls or overages can be devastating, especially if they have not been planned for.

The Office of Institutional Research, beginning with the fiscal year 1981 projections, has developed projections which provide ranges of possible enrollments rather than single projection figures. We believe that this approach is more practical than the approach which has been used by the College in the past. These projection series are reviewed by appropriate College personnel, including the President, the Vice Presidents and the Campus Chancellors. A consensus is reached by these individuals and Office of Institutional Research staff concerning the projection series which is most appropriate for use in planning the College's future. It is the projection series arrived at through this process which is presented here.

B. The Framework for Projecting Enrollment

We have selected the term "framework" rather than "model" to describe our enrollment projection approach because several independent methods have been considered, and components of each of these were incorporated into our framework. We wish to stress that this framework should be viewed as part of a decision making and planning process. Outputs of the projection framework include assumptions which must be met in order that projected levels of enrollment be attained. Since the outputs of the framework include a band of enrollment projections for a series of five years rather than a single estimate for each year, College officials have been able to discuss the reasonableness of the set of assumptions associated with each of the projection series and to determine the resources and activities necessary to realize the assumptions deemed most appropriate.

There are two principal projection techniques which are applied within the framework: a mathematical technique (curve fitting) and a statistical technique (yield from population components). Each of these techniques will be discussed in detail in the remainder of this section.

Method I - Curve Fitting

The theoretical assumption underlying projection by curve fitting is that enrollment growth during a specified period of time can be described by some type of mathematical function and that enrollment growth will continue, in the future, to follow the path it has followed in the past. We have evaluated three separate types of curves, one of them linear and two of them nonlinear, for effectiveness in describing the growth of headcount enrollment at Montgomery

College. These curves, including the one deemed most appropriate, will be discussed more fully below.

Method II - Yield from Population Components

The Montgomery College student body is made up of components with varying degrees of importance for the total enrollment. The main components comprise the following: new entrants who are recent high school graduates of Montgomery County or of surrounding counties in Maryland and Washington, D.C.; returning matriculated students from previous semesters; and adult Montgomery County residents. The College has data available concerning the size of the parent populations from which these components are drawn and trend data for yield rates to the College from these populations. Projections for each component can be made by applying projected yield coefficients to projected population statistics. Overall enrollment for a given year is then projected as the sum of the components for that year.

Comparison of Two Projection Methods

The relationship between these two projection types deserves some consideration. Curve fitting of the type we have described above has time as the independent variable and is based upon the assumption that the curve which has most closely approximated growth in the past will be that which most closely approximates growth in the future. It should readily be apparent that this is not always a good assumption, since it fails to consider such information as unusual growth patterns in certain elements of the population. The components method, on the other hand, allows us to avoid the use of time as an independent variable and to use, instead, independently projected values of population components and yield rates. The reliability of the projection series is then greatly increased because it takes into account population characteristics and changes and because it is based upon several independent variables whose probable errors may be expected to cancel each other out to some extent.

Given that the components method is the more reliable and defensible of the two approaches, why bother to include the curve fitting method as part of the framework? The curve fitting method is used as a means of validation of the projections obtained through the components method. Should a substantial discrepancy be found in the projections obtained through these two methods, it can be taken as indicating a need for additional close examination of the assumptions upon which the components method is based.

C. Application of the Framework

Trends in Montgomery College Headcount Enrollment Since 1955 and Curve Fitting

Headcount enrollment by year at Montgomery College is displayed

in Figure A. Although a straight line can be reliably fitted to these data (r=.956), it is clear from observation that the data exhibit a significant deviation from linearity. Another type of curve that can be fitted to the data is an exponential curve, which also yields a highly reliable fit (r=.991). However, such a curve yields unreasonable projections of enrollment in the long run (e.g., 100,000 students in 1988).

Further examination of the enrollment distribution reveals a slowdown in enrollment growth starting in 1974 or 1975. The form of curve which this pattern suggests is logistic or "S" shaped. A fitted logistic curve with an upper limit of 20,000 students, which is approached in 1990, yields a nearly perfect fit (r=.999) to the data (Figure B). The selection of 20,000 as a theoretical upper limit for Montgomery College headcount enrollments is based upon projection series derived from the components (Method II) projection method and considerations of maximum utilization of current and projected College facilities. The high correlation coefficient suggests that 20,000 is an appropriate limit for the logistic curve.

Thus while any of the three mathematical models could provide reasonable accuracy of projection for the next one to three years, the logistic model appears to have the best potential for being an accurate predictor of enrollment in the more distant future. This model projects fall 1980 enrollments of 16,900 and fall 1981 enrollments of 17,500. These figures are identical to those obtained for the middle series through the components method which is discussed in the next section.

Projections from Population Components

This aspect of the enrollment projection framework is an adaptation of the previous Montgomery College enrollment projection model to allow for the calculation of enrollment ranges. The actual method of projection involves combining for each segment of the student body (1) external information on the size of that segment with (2) past Montgomery College experience with that segment. This historical information is then tempered with consideration of reasonable expectations for the future. It is these expectations or assumptions about the future that are varied to derive the possible ranges of enrollment.

Below are listed the segments of total enrollment that are projected separately and the sources of external data for each segment.

Segment	Data Source
High school graduates and early placements	Division of Planning, Montgomery County Public Schools
Out-of-county students	Maryland Dept. of State Planning, projection of enrollment in twelfth grade in neighboring counties

Figure A
Actual Enrollment 1955-1979

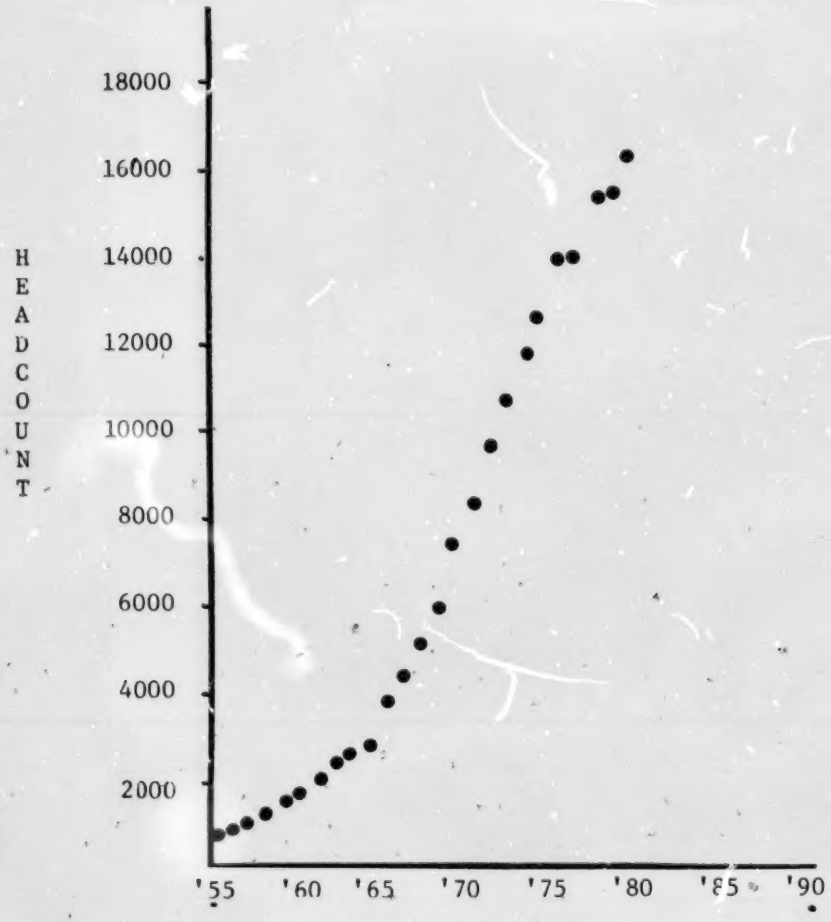
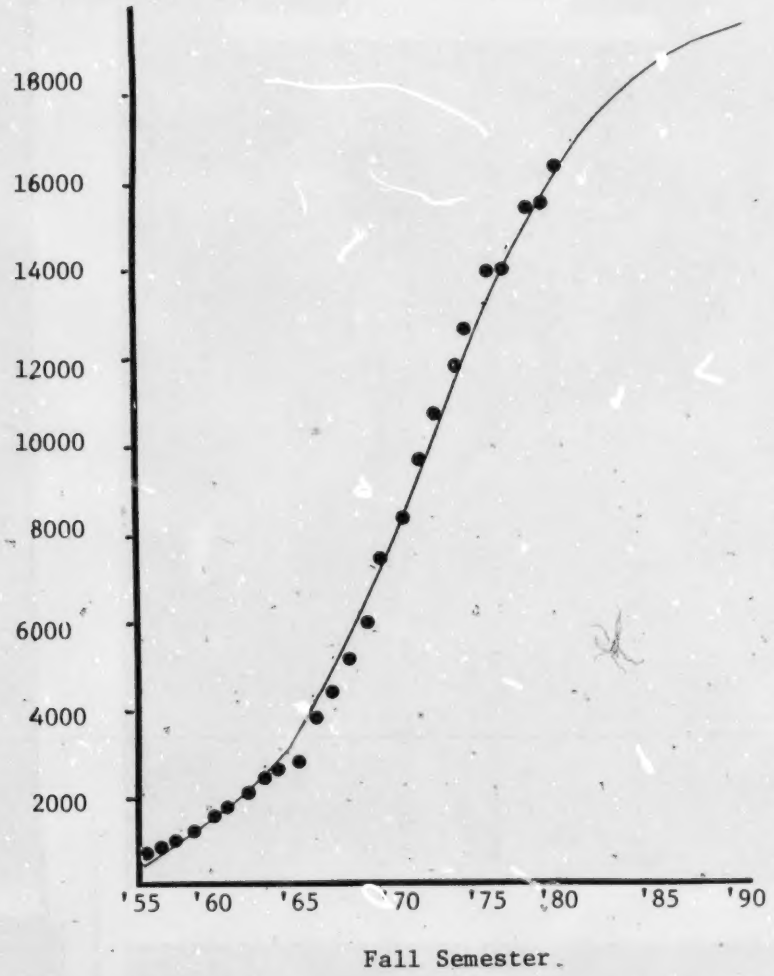


Figure B
Actual and Projected Enrollment 1955-1990



Segment (Continued)	Data Source (Continued)
Out-of-state students	Related to size of College and extensiveness of its programs. Past enrollment trends are projected into future.
Returning matriculated students	Past retention rates
Older County residents	Montgomery County Planning Board projections of population between 20 and 55 years of age
Off-campus credit enrollments	Past history and current program development efforts

The following sections of this report present the official College enrollment projection, representing the "middle" series of the projected ranges. In addition, methods of projecting credit hours and distributing enrollments by campus will be discussed in later sections.

Figure C is a map of population density zones in Montgomery County, showing the locations of the three College campuses at Takoma Park, Rockville and Germantown in relation to the various density zones.

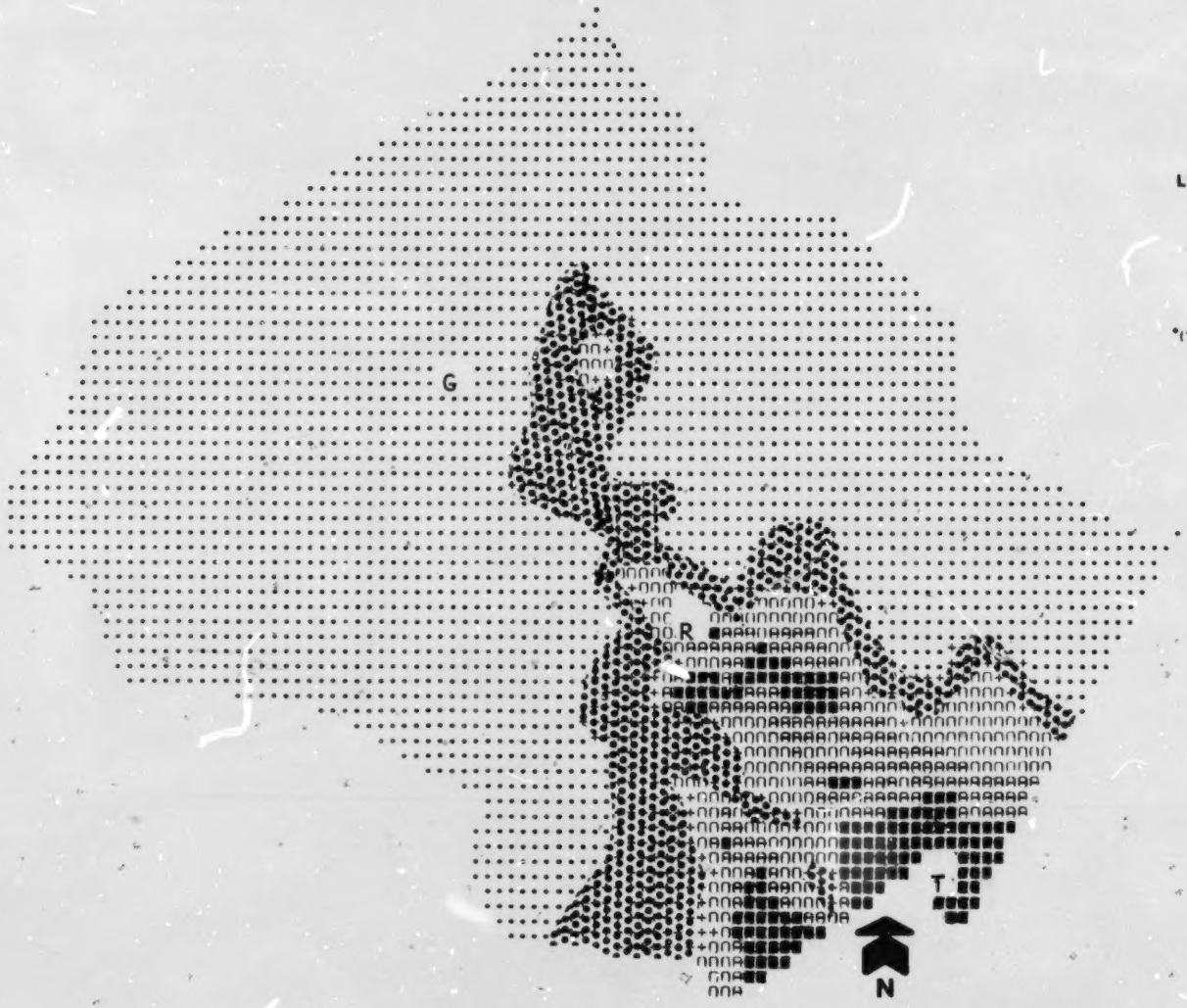
Assumptions of Middle Series of Projections

The following assumptions, which are discussed in more detail below, were used to formulate the College's middle projection series.

1. No growth in yield rate for graduates of most recent high school class.
2. A two percentage point increase in yield rate for recent high school graduates delaying entry to college for one to three years.
3. Moderate increase in yield rate for older county citizens (ages 20 - 55), from .020 to .021.
4. Increase in returning matriculated rate from .57 to .59.
5. Moderate increase in yield rate for out-of-county, in-state students.
6. Moderate increase in yield rate for international students.
7. Off-campus credit enrollment to increase from 751 to 850.
8. Total credit enrollment to correspond to enrollment predicted from logistic model using 20,000 as upper limit.

FIGURE C

POPULATION DENSITY IN MONTGOMERY COUNTY, 1976

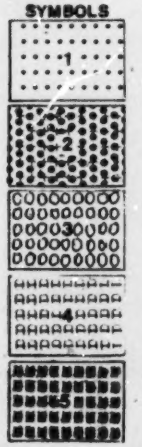


ABSOLUTE VALUE RANGE APPLYING TO EACH LEVEL
(Persons per Square Mile)

LEVEL	MINIMUM	MAXIMUM*
1	61.90	1858.84
2	1858.84	3793.79
3	3793.79	5658.75
4	5658.75	7578.07
5	7578.07	27600.00

*('MAXIMUM' INCLUDED IN HIGHEST LEVEL ONLY.)

SYMBOLS



G: GERMANTOWN CAMPUS
R: ROCKVILLE CAMPUS
T: TAKOMA PARK CAMPUS

SOURCE: FORECAST FOR PEOPLE, JOBS AND HOUSING, MONTGOMERY COUNTY PLANNING BOARD, 1976

CHAPTER II

COMPONENTS OF ENROLLMENT

Part I: High School Graduates as a Segment of the Total College Enrollment

In order to project enrollment by student source segments, it is necessary to identify and evaluate several separate categories within each segment. In the high school segment of the enrollment projection model, each category depends in one way or another on the number of graduates from the high schools in Montgomery County. The principal categories considered are: (1) those students entering Montgomery College immediately after graduation from a public high school, (2) those students who enter the College after some years of employment, military service, travel, etc., (3) private and parochial high school graduates, and (4) early placement students--those who enroll at the College while still in high school. A change in the number of students in any one of these categories has a direct effect on the size of the segment and is reflected in the total enrollment of the College.

Immediate Entry Into College

Projections of twelfth grade enrollments in Montgomery County public schools are shown in Table II-1. The College's model uses regional breakdowns derived from the projections for individual high schools aggregated within the three regions shown on the College's map of the Montgomery County high schools (Figure D). The boundaries among the three regions are determined by the College enrollment rates of the public high schools, and may be thought of as roughly corresponding to the service areas of the three campuses. The composite enrollment rate for each region is used in the College enrollment projection model.

While Table II-1 gives an indication of the expected decline in twelfth grade enrollments within Montgomery County, the following graph (Figure E) dramatically portrays the shift in the distribution of students from region to region which can be expected to occur over the next five years.

Apparently, the trend of fewer young people entering college immediately out of high school in past years has been reversed, according to the Montgomery County public school follow-up studies of graduates; e.g., in 1971, 71.6 percent of the graduating class went on to college. This had dropped to 67.7 percent by 1973. However, the 1974 figure was almost two percentage points above the 1973 findings suggesting a possible leveling off of the decline, and the 1975, 1976, 1977 and 1978 figures show a return to earlier rates (Table II-2).

TABLE II-1

MONTGOMERY COUNTY PUBLIC SCHOOLS
PROJECTED 12TH GRADE ENROLLMENT BY REGION
1980 THROUGH 1984

MONTGOMERY COLLEGE ENROLLMENT REGIONS	NUMBER OF HIGH SCHOOLS	1979[1] 1980	1980[2] 1981	1981[2] 1982	1982[2] 1983	1983[2] 1984
Upper County	4	1280	1475	1499	1501	1517
Middle County	9	3850	3738	3550	3331	3206
Lower County	9	3914	3720	3445	3207	3064
TOTAL	22	9044	8933	8494	8039	7787

Source: 1. Division of Planning, Montgomery County Public Schools
2. Estimated from projections for total high school enrollments in Budget Reques : Capital Expenditures for the Fiscal Year Ending June 30, 1980, Board of Education, Montgomery County, Maryland.

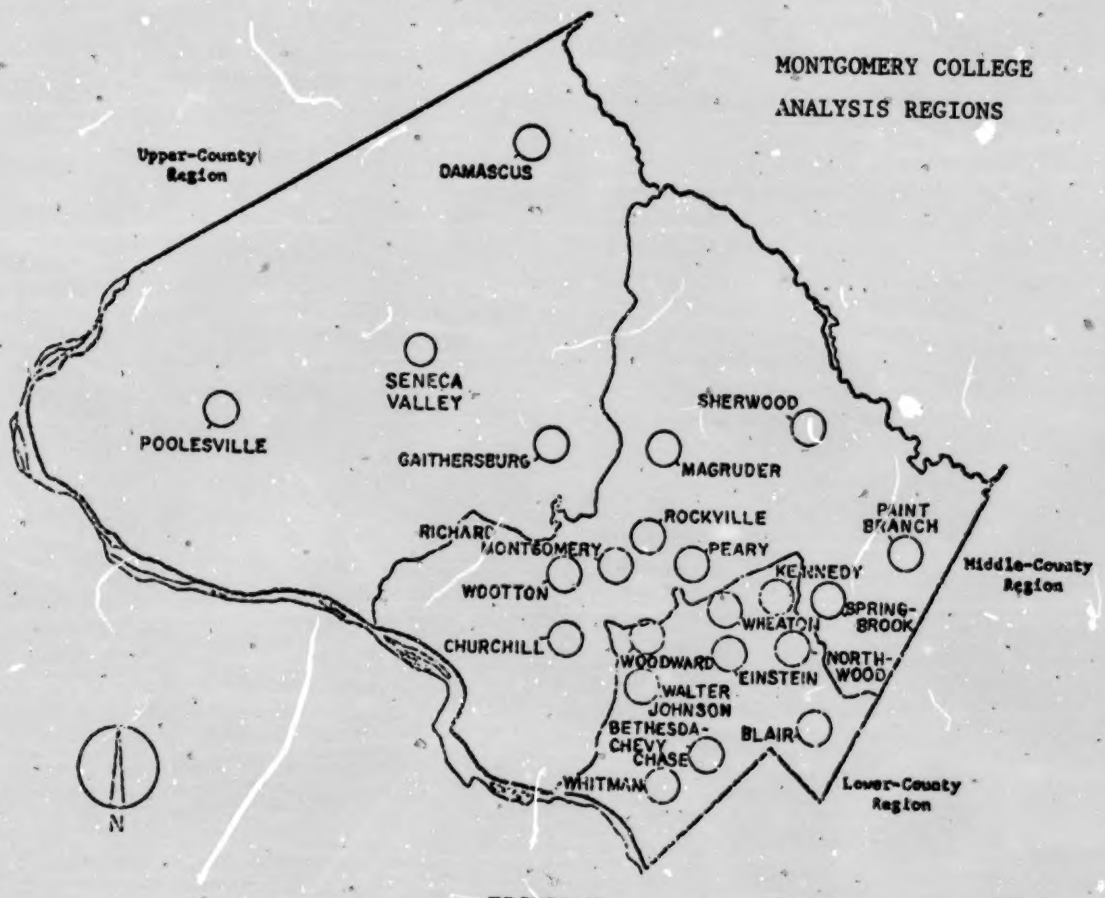
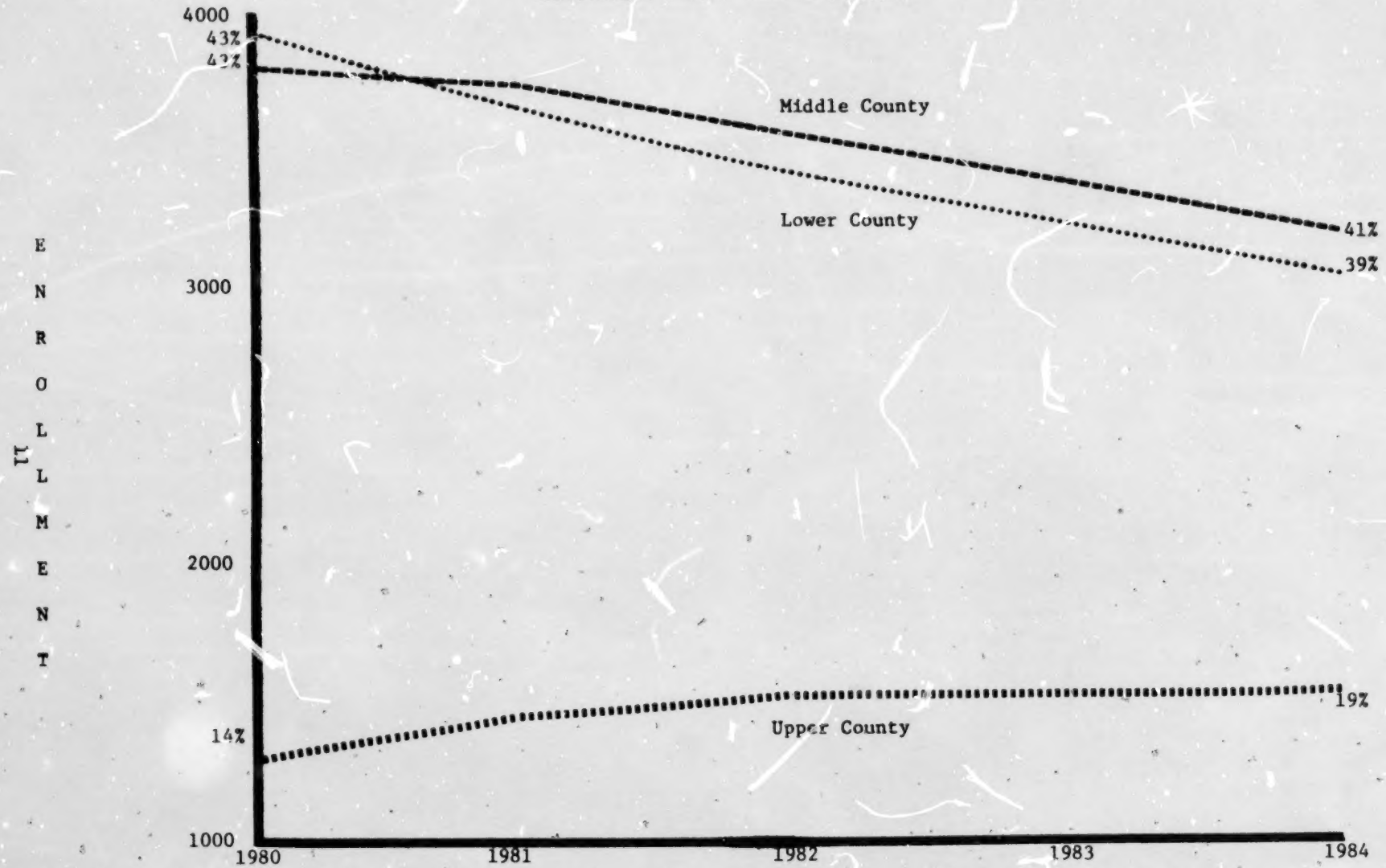


FIGURE D

FIGURE E

PROJECTED 12TH GRADE ENROLLMENTS 1980-1984
MONTGOMERY COUNTY PUBLIC SCHOOLS



As seen in Table II-3 the proportion of the students who enter Montgomery College immediately after high school has been stable during the past five years, some 18 to 19 percent of all the Montgomery County public high school graduates of the previous spring enrolled at the College in fall 1974, 1975, 1976, 1977, 1978 and 1979. The College expects that this enrollment rate will remain unchanged during the next five years.

TABLE II-2

COUNTY COMMUNITY COLLEGE AND STATE UNIVERSITY ATTENDANCE PATTERNS OF MONTGOMERY COUNTY PUBLIC HIGH SCHOOL GRADUATES*
1971 - 1978
(MCPS GRADUATE SURVEY)

DATE OF HIGH SCHOOL GRADUATION	TOTAL NO. OF GRADS	NO. CONTINUING THEIR EDUCATION	NO. ATTENDING MONT. COLLEGE	NO. ATTENDING U. OF MARYLAND
1971	8745	6259	1938	1368
	100%	71.6%	22.2%	15.6%
1972	9369	6468	2123	1362
	100%	69.0%	22.7%	14.5%
1973	9221	6241	1973	1312
	100%	67.7%	21.4%	14.2%
1974	9402	6599	1870	1545
	100%	70.2%	19.9%	16.4%
1975	9395	6909	2008	1701
	100%	73.5%	21.4%	18.1%
1976	9616	7049	2023	1688
	100%	73.3%	21.0%	17.6%
1977	9603	7159	1941	1831
	100%	74.5%	20.2%	19.1%
1978	9447	7076	1942	1650
	100%	74.9%	20.6%	17.5%

Source: Department of Educational Accountability, Montgomery County Public Schools

*As these data are based on the findings of annual follow-up studies, they do not agree with official third-week enrollment statistics of the College. The discrepancy results from the fact that the survey is conducted some months before the fall college term is to begin, and some students apparently change their minds during the intervening months.

TABLE II-3

ACTUAL AND PROJECTED MCPS GRADUATES
ENTERING MONTGOMERY COLLEGE
IMMEDIATELY AFTER HIGH SCHOOL GRADUATION

	MCPS GRADUATES	MCPS HIGH SCHOOL GRADUATES ENTERING MONTGOMERY COLLEGE IMMEDIATELY AFTER GRADUATION	PERCENT OF HIGH SCHOOL GRADUATES ENTERING MC
		A C T U A L[+]	
1971	8745	1820	21%
1972	9369	1842	20%
1973	9221	1816	20%
1974	9402	1670	18%
1975	9395	1808	19%
1976	9616	1757	18%
1977	9603	1850	19%
1978	9447	1725	18%
1979	9134	1768	19%
		P R O J E C T E D	
1980	9044	1745	19%
1981	8933	1725	19%
1982	8494	1650	19%
1983	8039	1550	19%
1984	7787	1510	19%

[+]Official third week fall enrollment figures

Delayed Entry

The students who delay their entry into higher education for six months or a few years represent the second largest component of the high school source segment. The portion of a high school graduating class which enrolls after a given time interval can be seen to be increasing relatively consistently over the recent past, permitting an estimation of yield per year from a given class (Table II-4). Thus, in projecting the contribution to the total College enrollment, it has been possible to build into the model an allowance for this category of student.

TABLE II-4

DELAY BETWEEN HIGH SCHOOL GRADUATION AND COMMUNITY COLLEGE ENTRANCE OF MONTGOMERY COUNTY HIGH SCHOOL GRADUATES

YEAR OF GRADUATION FROM HIGH SCHOOL	DIRECT ENROLLMENT AT MONTGOMERY COLLEGE SAME YEAR (FALL SEM.)	DELAYED ENROLLMENT 1 YR.	2 YRS.	3 YPS.	TOTAL TO DATE (FALL 1979)
1979	1768 (19.4%)				1768 (19.4%)
1978	1725 (18.3%)	474 (5.0%)			2199 (23.3%)
1977	1850 (19.3%)	462 (4.8%)	225 (2.3%)		2537 (26.4%)
1976	1757 (18.3%)	462 (4.8%)	186 (1.9%)	133(1.4%)	2538 (26.4%)

Private and Parochial Schools

While the number of graduates from the private and parochial schools within Montgomery County has been quite stable, the proportion which enrolls at Montgomery College has varied somewhat in the past six years. As Table II-5 indicates, this variation has centered around 8-9%.

TABLE II-5

PERCENTAGES OF PRIVATE AND PAROCHIAL HIGH SCHOOL GRADUATES ENROLLING AT MONTGOMERY COLLEGE

	1973	1974	1975	1976	1977	1978	1979
Private Schools	4%	4%	3%	3%	4%	6%	5%
Parochial Schools	13%	8%	11%	12%	9%	10%	12%
TOTAL	10%	6%	8%	9%	7%	8%	9%

Early Placement Students

Montgomery College and the public high schools of the County have jointly established an early placement program in college work for selected high school students who have completed their junior year. To be eligible, a high school student must have accumulated at least 14 Carnegie units in major subjects, have an overall "B" average, and have the recommendation of his or her high school principal and guidance counselor.

The number of high school seniors participating in the early placement program is shown in Table II-6. The average number of participants for the last five fall semesters has been about 100. However, a substantial increase has been recorded in 1979.

TABLE II-6

EARLY PLACEMENT ENROLLMENT OF
COUNTY HIGH SCHOOL SENIORS AT MONTGOMERY COLLEGE

	HIGH SCHOOL SENIORS PARTICIPATING IN EARLY PLACEMENT PROGRAM
Fall 1974	131
Fall 1975	103
Fall 1976	100
Fall 1977	110
Fall 1978	107
Fall 1979	154

Summary

The combination of all the categories (1) immediate enrollment, (2) delayed enrollment, (3) private and parochial school graduations, and (4) early placement students are embodied in the high school graduate source segment of the enrollment projections. Table II-7 shows the actual and projected sum of the five categories of students entering Montgomery College within the high school segment of the total projected enrollment. Note that the loss of students due to the declining population of high school graduates is offset to some extent by the increasing tendency of other aspects of the high school component to increase. However, a substantial net loss is expected in this component in coming years.

TABLE VI-7

MONTGOMERY COUNTY HIGH SCHOOL STUDENTS
ENTERING MONTGOMERY COLLEGE WITHIN ALL CATEGORIES OF THE
HIGH SCHOOL SEGMENT OF THE TOTAL PROJECTED ENROLLMENT

FALL	STUDENTS	ANNUAL RATE OF CHANGE
	ACTUAL	
1972	2324	-
1973	2551	+ 9.8%
1974	2361	- 7.4%
1975	2500	+ 5.9%
1976	2568	+ 2.7%
1977	2666	+ 3.8%
1978	2665	-
1979	2845	+ 6.8%
	PROJECTED	
1980	2800	- 1.6%
1981	2795	- 0.2%
1982	2675	- 4.3%
1983	2525	- 5.6%
1984	2460	- 2.6%

Part II: Out-of-County and Out-of-State Residents as a Segment of the Total College Enrollment

Maryland Residents

Montgomery College students who are non-county residents are drawn primarily from the neighboring areas of Frederick, Howard, and Prince George's Counties. Specialized programs, a large variety of course offerings, excellent faculty and facilities, and geographical proximity are some of the features of Montgomery College which attract these students. The College has become even more attractive with the renovation of Takoma Park campus and the completion of the campus at Germantown.

The most reliable base found for making projections of this segment has been the projections of twelfth grade enrollment in the public high schools in each of the neighboring counties. These projections are published by the State of Maryland Department of State Planning. The most recent report was entitled Public School Enrollment Projections 1977-1987 issued June 1978. About 90 percent of the out-of-county students are from the neighboring counties of Prince George's, Frederick, and Howard. The College expects the enrollment rate for this segment to increase by one percentage point during the next five years. However, lack of growth in the high schools in these counties should lead to a leveling off in this segment.

TABLE II-8

ACTUAL AND PROJECTED MARYLAND RESIDENTS

ENROLLING AT MONTGOMERY COLLEGE

FALL	MARYLAND RESIDENTS	ANNUAL RATE OF CHANGE
	ACTUAL	
1971	354	- 9.2%
1972	378	+ 6.8%
1973	353	- 6.6%
1974	360	+ 2.0%
1975	377	+ 4.7%
1976	366	- 2.9%
1977	439	+18.6%
1978	508	+17.1%
1979	560	+10.2%
	PROJECTED	
1980	570	+ 1.8%
1981	590	+ 3.5%
1982	565	- 4.2%
1983	555	- 1.8%
1984	565	+ 1.8%

Non-Residents

Out-of-state enrollment has two principal sources - District of Columbia residents and aliens holding student visas, although some students do come from northern Virginia and other areas. Of the two sources, the aliens holding student visas constitute the larger number.

For projecting enrollments of these international students there is no completely satisfactory data base; however, there appears to be a direct relationship between the size of the College, the extensiveness of its programs, and its attractiveness to the international student. Also, it can be assumed that most potential international students learn about Montgomery College through personal contact with other international students who are alumni or who are currently enrolled. Thus, growth of the matriculated student body appears to be the best available basis for projecting the number of international students. However, two forces have come into play which have tended to limit the number of out-of-state students. The Immigration Service has tightened the administration of regulations regarding aliens holding student visas, and at the same time tuition has been raised for non-residents. Other colleges in the metropolitan area have much lower tuition. The full impact of these two forces had a serious effect on the enrollment of out-of-state students in the fall of 1975 and spring of 1976. The result was a 16 percent drop from fall 1974 and a 13 percent drop from spring of 1975. However, this trend has reversed itself and the College now anticipates a continuation of moderate growth in this component.

The data base for projecting the number of District residents enrolling is the twelfth grade enrollment of District high schools and is treated in the same way as the out-of-county enrollment segment. Combining the results of projecting the non-resident enrollment using the two primary sources provides the figures in Table II-9.

TABLE II-9

ACTUAL AND PROJECTED NON-RESIDENTS
ENROLLING AT MONTGOMERY COLLEGE (ON AND OFF-CAMPUS)

FALL	NON-RESIDENTS	ANNUAL RATE OF CHANGE
	A C T U A L	
1972	736	+28.1%
1973	1006	+36.7%
1974	1035	+ 2.9%
1975	869	-16.0%
1976	889	+ 2.3%
1977	1060	+19.2%
1978	1219	+15.0%
1979	1305	+ 7.1%
	P R O J E C T E D	
1980	1380	+ 5.7%
1981	1430	+ 3.6%
1982	1485	+ 3.8%
1983	1520	+ 2.4%
1984	1545	+ 1.6%

Part III: Returning Matriculated Students as a Segment of the Total College Enrollment

The segment of the total college enrollment which consists of matriculated students continuing from the previous year is dependent on the retention rate and the number of new entrants matriculating during the previous year. Matriculated students are those persons who are admitted to a degree or certificate curriculum and may attend the College either full-time or part-time.

Students tend to take longer than two years to complete their programs. For example, 9 percent of the students who entered Montgomery in the fall of 1970 were still enrolled during the fall of 1973, while 11 percent of the students who enrolled in the fall of 1971 were still enrolled during the fall of 1974, and over 10 percent of the students who entered in fall of 1972 were still attending the College in the fall of 1975. The current retention rate from spring to fall for matriculated students is approximately 57 percent, and is expected to increase slightly to 59 percent during the next five years.

A factor affecting the growth of this segment is the number of new matriculating entrants each year, which is highly dependent on the number of recent high school graduates and out-of-county students who enter the College during the previous year. As these segments level off or decline, growth in the returning student segment will diminish (Table II-10).

TABLE II-10

ANNUAL GROWTH RATE OF THE RETURNING MATRICULATED STUDENT SEGMENT
1972 - 1984

FALL	RETURNING STUDENTS	ANNUAL RATE OF CHANGE
	ACTUAL	
1972	4642	+10.6%
1973	4854	+ 4.6%
1974	4642	- 4.4%
1975	5059	+ 9.0%
1976	4990	- 1.4%
1977	4937	- 1.1%
1978	4888	- 1.0%
1979	5203	+ 6.4%
	PROJECTED	
1980	5595	+ 7.5%
1981	5870	+ 4.9%
1982	6130	+ 4.4%
1983	6355	+ 3.7%
1984	6375	+ 0.3%

Part IV: Older County Residents as a Segment of the Total College Enrollment

Students who are older than traditional college age, and who feel that they can benefit from the programs of the College may be admitted to college courses. Individuals who have graduated from Montgomery or any other college or university may also enroll as students when they feel they can benefit from courses at Montgomery. Some of these students initially come in contact with the College through enrollment in extension credit courses offered near their homes. Eventually, these same students may well enroll on campus to benefit from the full range of courses and services available on campus compared to those available at extension centers.

The number of students in this category has increased rapidly at Montgomery. As presented in Table II-11 there were 145 percent more older students enrolled for the fall semester of 1979 than in the fall of 1972. This enrollment pattern is the result of many factors - citizens returning to college in order to complete their education; those beginning their college career but at a cautious pace; as well as those individuals attending for self-improvement, preparation in a special job-related skill, or job upgrading, to name a few.

The most reliable reference point for predicting the number of students in this segment has proved to be total county population in the 20-55 year old age group. The latest available population projections for Montgomery County (released in 1979), show the expected population in 1984 to be 626,500, while the 1973 projection extended to 1984 was 763,730. In effect, the Planning Board is now projecting that more than 100,000 fewer people will be living in the County than were projected in 1973 (Figure F).

There are two forces working in opposite directions, (1) more citizens are taking advantage of the educational programs of the College, and at the same time, (2) the total number of persons expected to live in the County has been reduced considerably from previous projections, thus reducing the size of the projected potential pool of prospective students over the next ten years.

The projections are based on the assumption that the rate at which older students enroll will continue to increase over the next five years, and will tend to offset the reduced growth rate which would otherwise result from the new and lower population projections made by the County Planning Board.

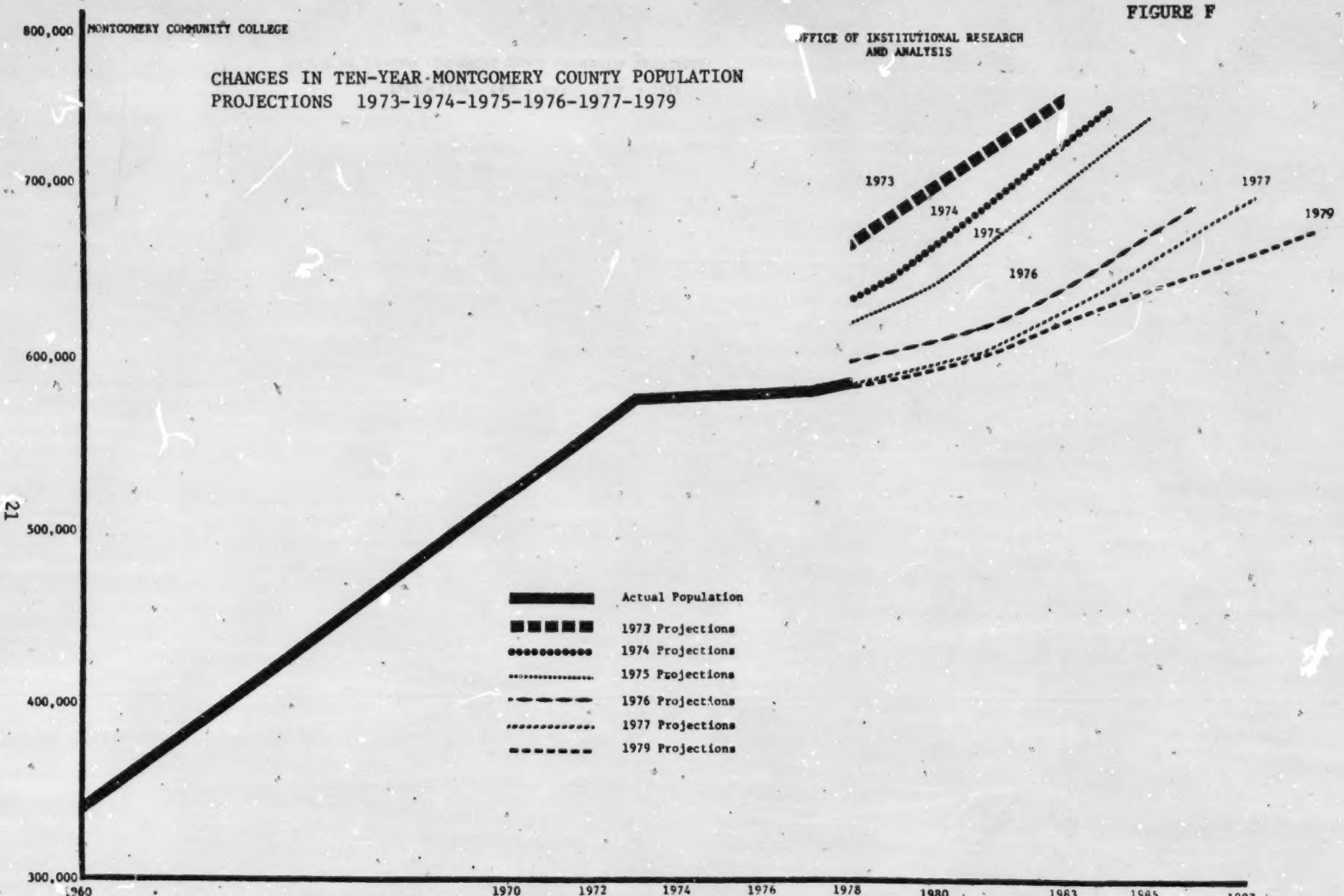
Rather than the rapid enrollment growth of the mid-seventies continuing, a more moderate increase slightly greater than the growth rate of the county population is foreseen as reasonable for the next five years. This growth is dependent on continuation of the proven determination of Montgomery College in developing programs and services to meet community educational needs. Further, the redevelopment

FIGURE F

MONTGOMERY COMMUNITY COLLEGE

OFFICE OF INSTITUTIONAL RESEARCH AND ANALYSIS

CHANGES IN TEN-YEAR MONTGOMERY COUNTY POPULATION PROJECTIONS 1973-1974-1975-1976-1977-1979



Source - 1973 - Population and Household Growth Forecast 1973-1983, Montgomery County Planning Board, p. 41.
1974 - Population, Household and Employment Growth Forecast 1974-1984, Montgomery County Planning Board, p. 25.
1975 - Fiscal Impact Analysis, Second Annual Growth Policy Report, 1975, Montgomery County Planning Board, p. A-24.
1976 - Forecast for People, Jobs and Housing, Montgomery County Planning Board, Oct. 1976, p. 38.
1977 - Carrying Capacity & Adequate Public Facilities, Montgomery County Planning Board, October 1977, p. 2-5
1979 - Long Range Forecast: People, Jobs and Housing, Montgomery County Planning Board, August, 1979

OIRA 7-14

of Takoma Park Campus and the opening of the new Germantown Campus will make educational opportunities available to entirely new segments of County citizens (Table II-11).

TABLE II-11

COMPARISON OF PERCENTAGE GROWTH FROM PREVIOUS YEAR
OF OLDER COUNTY RESIDENTS (ON-CAMPUS)

FALL	NON-MATRICULATED STUDENTS	ANNUAL RATE OF GROWTH
	ACTUAL	
1972	2381	+17.7%
1973	2672	+12.2%
1974	3808	+42.5%
1975	4507	+18.4%
1976	4592	+ 1.9%
1977	5486	+19.5%
1978	5487	-
1979	5837	+ 6.4%
	PROJECTED	
1980	5960	+ 2.1%
1981	6195	+ 3.9%
1982	6400	+ 3.3%
1983	6625	+ 3.5%
1984	6885	+ 3.9%

Part V: Off-Campus or Extension Credit Students as a Segment of the Total College Enrollment

The number of students participating in the off-campus or extension credit program of the College has depended on the program development efforts of the staffs of the Community Services unit and the off-campus programs offered by the Takoma Park and the Germantown campuses. As new extension sites were established and centers opened, and as relevant course offerings were made available to the public, the number of students increased from 154 in the fall of 1971 to 839 in the fall of 1978. However, in the fall of 1979 responsibility for the Community Services Off-Campus credit programs was shifted to the Rockville, Takoma Park and Germantown campuses. As a result, there was a slight decline in total enrollment. The College expects that enrollments in these programs will return to previous levels during the next five years (Table II-12). Included in these numbers are students who attended classes only at off-campus sites. Excluded are those who effected dual registrations between one of the campuses and an extension site.

TABLE II-12

OFF-CAMPUS OR EXTENSION CREDIT ENROLLMENT

FALL	TAKOMA PARK OFF-CAMPUS		TV COLLEGE OF THE AIR		GERMANTOWN OFF-CAMPUS		COMMUNITY SERVICES CREDIT COURSES		TOTAL OFF-CAMPUS CREDIT ENROLLMENT	
	STUDENTS	PERCENT INCREASE	STUDENTS	PERCENT INCREASE	STUDENTS	PERCENT INCREASE	STUDENTS	PERCENT INCREASE	STUDENTS	PERCENT INCREASE
1971							154	-	154	-
1972							228	+48.1%	228	+48.1%
1973							356	+56.1%	356	+56.1%
1974							533	+49.7%	533	+49.7%
1975					(189)**		729	+36.8%	729	+36.8%
1976	96	-	(14)*		(266)**		632	-13.3%	728	- 0.1%
1977	121	+26.0%	(6)*		(466)**		639	+ 1.1%	760	+ 4.4%
1978	153	+26.4%	(2)*		91	-	595	- 6.9%	839	+10.4%
1979	204***	+33.3%	(28)*		136***		411***		751	-10.5%
PROJECTIONS										
1980	210	+ 2.9%	(50)*	-	145	+ 6.6%	420	+ 2.2%	775	+ 3.2%
1981	215	+ 2.4%	(50)*	-	150	+ 3.4%	435	+ 3.6%	800	+ 3.2%
1982	220	+ 2.3%	(50)*	-	150	-	455	+ 4.6%	825	+ 3.1%
1983	225	+ 2.2%	(50)*	-	150	-	475	+ 4.4%	850	+ 3.0%
1984	225	-	(50)*	-	150	-	475	-	850	-

*Included in Takoma Park Campus totals.
**Included as campus totals - Germantown Campus opened in fall of 1978.
***Community Services off-campus credit programs distributed among the Takoma Park, Germantown, and Rockville off-campus programs.

TABLE II - 12: OFF-CAMPUS OR EXTENSION CREDIT ENROLLMENT

FALL	TAKOMA PARK OFF-CAMPUS STUDENTS	TAKOMA PARK OFF-CAMPUS PERCENT INCREASE	TV COLLEGE OF THE AIR STUDENTS	TV COLLEGE OF THE AIR PERCENT INCREASE	GERMANTOWN OFF-CAMPUS STUDENTS	GERMANTOWN OFF-CAMPUS PERCENT INCREASE	COMMUNITY SERVICES CREDIT COURSES STUDENTS	COMMUNITY SERVICES CREDIT COURSES PERCENT INCREASE	TOTAL OFF-CAMPUS CREDIT ENROLLMENT STUDENTS	TOTAL OFF-CAMPUS CREDIT ENROLLMENT PERCENT INCREASE
1971							154	-	154	-
1972							228	+48.1%	228	+48.1%
1973							356	+56.1%	356	+56.1%
1974							533	+49.7%	533	+49.7%
1975					(189)**		729	+36.8%	729	+36.8%
1976	96	-	(14)*		(266)**		632	-13.3%	728	- 0.1%
1977	121	+26.0%	(6)*		(464)**		639	+ 1.1%	760	+ 4.4%
1978	153	+26.4%	(2)*		91	-	595	- 6.9%	839	+10.4%
1979	204+	+33.3%	(28)*		(136)**		411+		751	-10.5%
1980	210	+ 2.9%	(50)*	-	145	+6.6%	420	+ 2.2%	775	+ 3.2%
1981	215	+ 2.4%	(50)*	-	150	+3.4%	435	+ 3.6%	800	+ 3.2%
1982	220	+ 2.3%	(50)*	-	150	-	455	+ 4.6%	825	+ 3.1%
1983	225	+ 2.2%	(50)*	-	150	-	475	+ 4.4%	850	+ 3.0%
1984	225	-	(50)*	-	150	-	475	-	850	-

*Included in Takoma Park Campus totals.
**Included as campus totals - Germantown Campus opened in fall of 1978.
+Community Services off-campus credit programs distributed among the Takoma Park, Germantown, and Rockville off-campus programs.

CHAPTER III

SUMMARY OF ENROLLMENT SEGMENTS

When the projected number of students who are County high school graduates, Maryland residents, non-residents, returning matriculants, older County residents, or enrolled at off-campus sites are aggregated, a projection of the total enrollment of the College is produced. Each segment's contribution to the total is independent of the others inasmuch as the data base and assumptions from which each is derived are independent. However, one should not lose sight of the original purpose of the projection model which is to estimate the total number of students enrolled and not the size of the separate segments. In the past, the overall projections have been quite accurate; however, the various segments have varied from expectations. Slight over-projections in one segment have offset under-projections in another, thus self-correcting the total.

Table III-1 is a composite of the values for each segment over the next five years, and Figure G illustrates the relationship of each segment to the total projection.

Table III-2 presents the anticipated growth rate from year to year resulting from the projection, and Table III-3 compares the projected enrollment of the College with the population projections of the Montgomery County Planning Board. Note that the College enrollment continues to grow at a faster rate than the County population; however, the decelerating growth rate discussed in the introductory section is apparent in Table III-2.

TABLE III-1

TENTATIVE

SEVEN-YEAR ACTUAL - FIVE-YEAR PROJECTIONS BY SOURCE SEGMENTS
FALL SEMESTERS

FALL	ACTUAL 1973	1974	1975	1976	1977	1978	1979	PROJECTIONS 1980	1981	1982	1983	1984
SOURCE SEGMENTS ON CAMPUS												
High School Graduates; Early Placement; Delayed Entry Students	2551	2361	2500	2568	2666	2665	2845	2800	2795	2675	2525	2460
Older County Residents	2672	3808	4507	4592	5486	5487	5837	5960	6195	6400	6625	6885
Returning Matriculated Students (County Res.)	4854	4642	5059	4990	4937	4888	5203	5595	5870	6130	6355	6375
Maryland Residents (On-Campus)	327	326	308	275	338	378	450	460	480	455	445	455
Non-Residents (On-Campus)	948	959	804	831	981	1132	1235	1310	1360	1415	1450	1475
SUB-TOTAL ON CAMPUS	11352	12096	13178	13256	14408	14550	15570	16125	16700	17075	17400	17650
EXTENSION CREDIT OFF CAMPUS												
County Residents	272	423	595	579	580	622	571	595	620	645	670	670
Maryland Residents	26	34	69	91	101	130	110	110	110	110	110	110
Non-Residents	58	76	65	58	79	87	70	70	70	70	70	70
SUB-TOTAL OFF CAMPUS	356	533	729	728	760	839	751	775	800	825	850	850
TOTAL ENROLLMENT	11708	12629	13907	13984	15168	15389	16321	16900	17500	17900	18250	18500

FIGURE G

ENROLLMENT PROJECTIONS BY SOURCE SEGMENT FALL 1980-1984

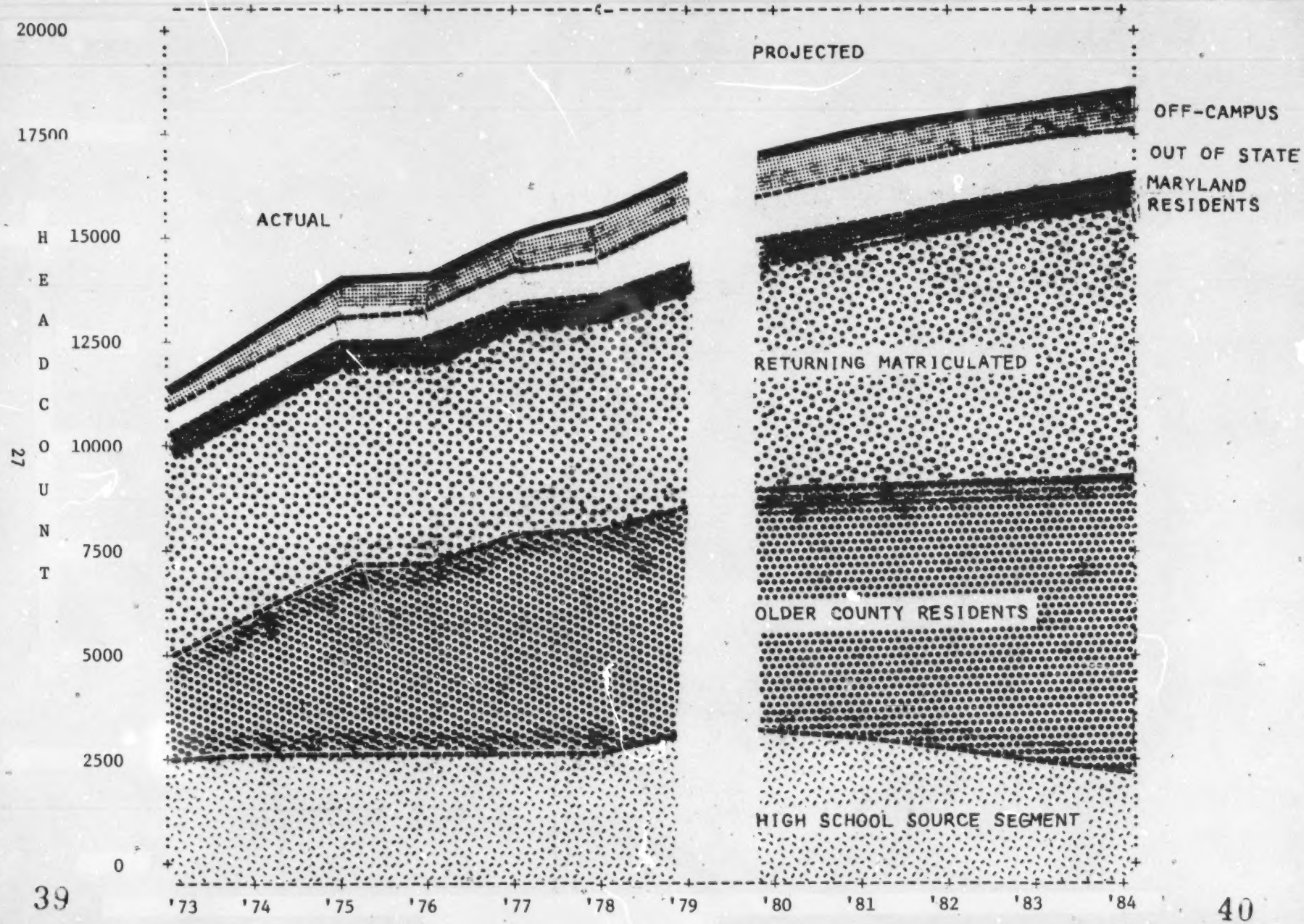


TABLE III-2

ACTUAL AND PROJECTED INCREASE IN TOTAL ENROLLMENT
FALL 1970 - 1984

FALL	TOTAL COLLEGE ENROLLMENT	PERCENT INCREASE (from previous year)
	ACTUAL	
1970	8484	15.9%
1971	9535	12.4%
1972	10645	11.6%
1973	11708	10.0%
1974	12629	7.9%
1975	13907	10.1%
1976	13984	0.5%
1977	15168	8.5%
1978	15389	1.5%
1979	16321	6.1%
	PROJECTED	
1980	16900	3.5%
1981	17500	3.6%
1982	17900	2.3%
1983	18250	2.0%
1984	18500	1.4%

TABLE III-3

ACTUAL AND PROJECTED TOTAL ENROLLMENTS AS PERCENTAGES OF THE POPULATION OF MONTGOMERY COUNTY

FALL	MONTGOMERY COUNTY POPULATION	MONTGOMERY COLLEGE ENROLLMENT	MONTGOMERY COLLEGE TOTAL PERCENTAGE
	ACTUAL		
1950	164,400[A]	541[B]	0.33
1952	202,800[A]	425[B]	0.21
1954	239,800[A]	493[B]	0.20
1956	275,300[A]	731[B]	0.26
1958	300,300[A]	1,091[B]	0.36
1960	340,900[A]	1,564[B]	0.46
1962	371,200[A]	2,367[B]	0.64
1964	405,600[A]	2,780[B]	0.68
1966	445,100[A]	4,318[B]	0.97
1968	502,100[A]	5,879[B]	1.17
1970	522,809[C]	8,484[B]	1.62
1971	536,800[C]	9,535[B]	1.78
1972	547,200[C]	10,645[B]	1.95
1973	562,600[C]	11,708[B]	2.08
1974	578,100[C]	12,629[B]	2.18
1975	589,600[D]	13,907[B]	2.36
1976	582,800[D]	13,984[B]	2.40
1977	584,000[E]	15,168[B]	2.60
1978	593,500[E]	15,389[B]	2.59
1979	599,000[G]	16,321[B]	2.72
	PROJECTIONS		
1980	604,500[G]	16,900[F]	2.80
1981	610,000[G]	17,500[F]	2.87
1982	615,500[G]	17,900[F]	2.91
1983	621,000[E]	18,250[F]	2.94
1984	626,500[G]	18,500[F]	2.95

A, B, C, D, E, F and G - for sources, see following page.

Sources:

A Factors Influencing Development of Montgomery County, the Maryland-National Capital Park and Planning Commission, Dec. 1969.

B Office of Institutional Research official enrollment figures

C Population, Household, and Employment Growth Forecast 1974-1984, Montgomery County Planning Board, November 1974.

D Forecast: People, Jobs and Housing, Third Annual Growth Policy Report, Montgomery County Planning Board, October 1976.

E Long Range Forecast: People, Jobs and Housing, Montgomery County Planning Board, August 1979.

F Office of Institutional Research enrollment projections, October 1979.

G Interpolations and extrapolations based on figures for 1978, 1983 and 1988.

CHAPTER IV

FISCAL YEAR CREDIT ENROLLMENTS BY CAMPUS, SEMESTER AND DAY/EVENING ATTENDANCE STATUS

Essential to projecting revenues available to the College to support its programs is the development of credit hour projections. The most difficult aspect of projecting credit hours is arriving at a reasonable estimate of future average credit hour loads. The average credit hour load at Montgomery College has been declining steadily since 1970. Regression analysis of average credit hour load against time gives a very high correlation (r=.989), indicating a very linear decrease between 1970 and 1979.

As with the curve fitting methods described above, this projection technique has the disadvantage of having time as the independent variable. Furthermore, in a reasonably short period of time the average credit hour load projection would approach 0, an impossible state of affairs as long as the College continues to offer courses. Because the decrease in average credit hour load has been associated with a massive influx of part-time students, a more reasonable approach to projecting credit hour load treats headcount as the independent variable. The relationship between headcount and average credit hour load is reliably linear (r=.984). This regression of load on headcount yields an equation which can be applied to projected headcount enrollments in order to derive projected credit hours. For instance, for a projected headcount of 19,000, the average credit hour load would be 7.49 and the projected credit hours would be 142,310. This second analysis provides a conceptually more satisfying approach to projecting credit hours. Thus, this regression method has been utilized in projecting credit hours.

Enrollment by Campus

Overall headcount and credit hour projections may be seen as yielding potential enrollments which must be distributed among the campuses and the off-campus credit programs. Campus projections are essential because almost all academic planning and staffing are done at the campus level. The best guides to distributing projected enrollments to the campuses are the history of enrollment growth at the campuses and our expectations, from the projection components, about yield rates from various areas of the County. Planning decisions about program and facilities development must also be taken into account when distributing enrollments by campus (Tables IV-1 to IV-4). Students at Montgomery College may attend any one of the College's campuses, and in some cases, students enroll for courses at more than one campus. When reporting and projecting enrollments the College assigns students to the campuses at which they take the majority of their courses. Thus, the number of students attending each campus, and particularly the off-campus credit programs, is somewhat higher than the numbers reflected in Tables IV-1 to IV-4.

Enrollment by Semester

Up to this point enrollment projections have been presented for the fall term only. Enrollments for the spring semester and summer session are typically smaller than the fall enrollment and can be derived from the fall enrollment by regression analysis. Tables IV-1 to IV-4 present enrollments by semester.

Day/Evening Enrollment

An essential component of the planning process is the breakdown of attendance patterns by day and evening. Accordingly, Table IV-5 presents credit enrollments by campus and day-evening attendance patterns. This table presents information concerning credit hour enrollments for fall term only, fall term being the period of maximum facilities utilization and maximum staffing.

TABLE IV-1

CAMPUS ENROLLMENT PROJECTIONS

ROCKVILLE CAMPUS

FISCAL YEAR	1978	1979	1980	1981	1982	1983	1984	1985
Headcount								
Summer	3519	3302	3434	3485	3525	3565	3605	3645
Fall	11277	10613	11217	11450	11700	11925	12150	12300
Spring*	10166	10001	10750	10990	11235	11450	11670	11800
Hours								
Summer	12733	12290	12686	12785	12955	13095	13225	13395
Fall	104568	96238	101001	101130	101270	101330	101475	101475
Spring*	92770	88396	94080	94210	94350	94400	94500	94500
Total Hours (Fiscal Year)	210071	196924	207767	208125	208575	208825	209200	209370

ROCKVILLE OFF-CAMPUS

Headcount								
Summer	116	153	124	125	125	125	125	125
Fall	639	595	411	420	435	455	475	475
Spring*	729	576	350	360	375	390	405	405
Hours								
Summer	357**	483**	362	375	375	375	375	375
Fall	2119**	2031**	1510	1515	1520	1530	1550	1570
Spring*	2587**	2098**	1150	1155	1160	1170	1210	1220
Total Hours (Fiscal Year)	5063	4612	3022	3045	3055	3075	3135	3165

*Includes Supplemental

**Community Services Off-Campus. These programs were divided among Rockville, Takoma Park and Germantown campuses in Fiscal 1980.

TABLE IV-2

CAMPUS ENROLLMENT PROJECTIONS

TAKOMA PARK CAMPUS

FISCAL YEAR	1978	1979	1980	1981	1982	1983	1984	1985
Headcount								
Summer	941	946	906	1065	1125	1185	1245	1305
Fall	2667	2774	2851	2975*	3100*	3150*	3200*	3250*
Spring+	2608	2731	2835	2950*	3070*	3125*	3170*	3215*
Hours								
Summer	3805	3831	3507	3965	4195	4405	4625	4855
Fall	25594	25883	25931	26940*	27040*	27200*	27260*	27300*
Spring+	25027	25254	25240	26130*	26260*	26400*	26470*	26480*
Total Hours (Fiscal Year)	54506	54968	54678	57035	57495	58005	58355	58635

*Includes 50 students and 150 credit hours enrolled in College of the Air.

TAKOMA PARK OFF-CAMPUS

Headcount								
Summer	17	18	218	125	125	125	125	125
Fall	121	153	204	210	215	220	225	225
Spring+	85	119	160	165	170	175	180	180
Hours								
Summer	17	18	623	375	375	375	375	375
Fall	367	372	605	620	630	640	660	660
Spring+	267	344	430	445	450	460	470	470
Total Hours (Fiscal Year)	651	734	1658	1440	1455	1475	1505	1505

+ Includes Supplemental

* Includes 50 students and 150 hours enrolled in College of the Air

TABLE IV-3

CAMPUS ENROLLMENT PROJECTIONS

GERMANTOWN CAMPUS

FISCAL YEAR	1978	1979	1980	1981	1982	1983	1984	1985
Headcount								
Summer	12							
Fall	464	1163	1502	1700	1900	2000	2050	2100
Spring*	548	1131	1455	1630	1820	1930	1970	2020
Hours								
Summer	36							
Fall	1577	6856	9158	10400	11740	12480	12790	13200
Spring*	1797	6768	8740	9950	11290	12000	12300	12600
Total Hours (Fiscal Year)	3410	13624	17898	20350	23030	24480	25090	25800

GERMANTOWN OFF-CAMPUS

Headcount								
Summer								
Fall	-	91	136	145	150	150	150	150
Spring*	-	151	120	130	130	130	130	130
Hours								
Summer								
Fall	-	282	432	460	460	460	460	460
Spring*	-	468	360	390	390	390	390	390
Total Hours (Fiscal Year)	-	750	792	850	850	850	850	850

*Includes Supplemental

TABLE IV-4

OVERALL COLLEGE ENROLLMENT PROJECTIONS

FISCAL YEAR	1978	1979	1980	1981	1982	1983	1984	1985
Headcount								
Summer	4605	4419	4682**	4800	4900	5000	5100	5200
Fall	15168	15389	16321**	16900	17500	17900	18250	18500
Spring*	14136	14709	15670	16225	16800	17200	17525	17750
Hours								
Summer	17028	16622	17178**	17500	17900	18250	18600	19000
Fall	134225	131662	138637**	141065	142660	143640	144195	144665
Spring*	122448	123328	130000	132280	133900	134820	135340	135660
Total Hours (Fiscal Year)	273701	271612	285815	290845	294460	296710	298135	299325

*Includes Supplemental

**Actual Enrollments

TABLE IV-5

PROJECTED ENROLLMENT BY DAY AND EVENING ATTENDANCE STATUS*

FISCAL YEAR		ACTUAL			PROJECTED				
		1978	1979	1980	1981	1982	1983	1984	1985
Fall Semester Credit Hours									
Rockville Campus Day	#	86966	79159	82952	82950	83000	83050	83100	83100
	%	83%	83%	82%	82%	82%	82%	82%	82%
Rockville Campus Eve	#	17207	16497	17650	17775	17860	17870	17965	17965
	%	17%	17%	18%	18%	18%	18%	18%	18%
Rockville Off-Campus Day	#	1293**	720***	533	530	535	535	535	535
	%	44%	30%	31%	31%	31%	31%	31%	30%
Rockville Off-Campus Eve	#	1665**	1705***	1169	1180	1185	1195	1215	1235
	%	56%	70%	69%	69%	69%	69%	69%	70%
Takoma Park Campus+ Day	#	22576	22216	22117	22470	22500	22550	22600	22600
	%	89%	87%	86%	84%	84%	83%	83%	83%
Takoma Park Campus+ Eve	#	2805	3429	3633	4280	4350	4460	4470	4510
	%	11%	13%	14%	16%	16%	17%	17%	17%
Takoma Park Off-Campus Day	#	-	209	327	350	350	355	360	360
	%	-	40%	39%	40%	40%	40%	40%	40%
Takoma Park Off-Campus Eve	#	-	320	520	520	530	535	550	550
	%	-	60%	61%	60%	60%	60%	60%	60%
Germantown Campus Day	#	511	4398	5929	6970	8220	8985	9435	9905
	%	30%	62%	65%	67%	70%	72%	74%	75%
Germantown Campus Eve	#	1202	2646	3237	3430	3520	3495	3355	3295
	%	70%	38%	35%	33%	30%	28%	26%	25%
Germantown Off-Campus Day	#	-	363	570	610	610	610	610	610
	%	-	100%	100%	100%	100%	100%	100%	100%
Germantown Off-Campus Eve	#	-	0	0	0	0	0	0	0
	%	-	0%	0%	0%	0%	0%	0%	0%
TOTAL COLLEGE Day	#	111346	107065	112428	113880	115215	116085	116640	117110
	%	83%	81%	81%	81%	81%	81%	81%	81%
TOTAL COLLEGE Eve	#	22879	24597	26209	27185	27445	27555	27555	27555
	%	17%	19%	19%	19%	19%	19%	19%	19%
GRAND TOTAL		134225	131662	138637	141065	142660	143640	144195	144665

* Actual credit hours taken on a particular campus are not exactly equal to those given in other distributions by campus due to students taking courses at more than one location. In general, off-campus totals in this table are higher than those shown on other tables.

** All off-campus enrollments combined

*** Off-campus program operated by Community Services

\+ Includes College of the Air.

CHAPTER V

ENROLLMENT BY FULL-TIME AND PART-TIME STATUS

The following tables (V-1 to V-7) provide the estimated number of students and the number of credit hours they can be expected to carry during the summer, fall, and spring of Fiscal Year 1980-81. The first table is a collegewide summary of the three terms showing the students who can be expected to enroll on campus in 12 or more credit hours or 11 or fewer credit hours, and those students who will be enrolled in classes at extension centers during Fiscal Year 1981.

TABLE V - 1

TENTATIVE ENROLLMENT PROJECTIONS
FISCAL YEAR 1980-81
COLLEGE CREDIT PROGRAM
TOTAL COLLEGE

Semester	TOTAL ON CAMPUS* 12 hrs. or more	11 hrs. or less	Total	FTE	OFF CAMPUS 11 hrs. or less	FTE	TOTAL COLLEGE 12 hrs. or more	11 hrs or less	Total	FTE
Summer 80										
Student Enrollment	-	4,550	4,550	550	250	25	-	4,800	4,800	583
Credit Hours	-	16,750	16,750		750		-	17,500	17,500	
Fall 80										
Student Enrollment	6,110	10,015	16,125	4,616	775	86	6,110	10,790	16,900	4,702
Credit Hours	86,485	51,985	138,470		2,595		86,485	54,580	141,065	
Spring 81										
Student Enrollment	5,910	9,660	15,570	4,342	655	66	5,910	10,315	16,225	4,409
Credit Hours	82,965	47,325	130,290		1,990		82,965	49,315	132,280	
Total Fiscal Year										
Credit Hours			285,510	9,517	5,335	177			290,845	9,694

NOTE: FTE = 30 credit hours

*Includes College of the Air

CHAPTER V

ENROLLMENT BY FULL-TIME AND PART-TIME STATUS

The following tables (V-1 to V-7) provide the estimated number of students and the number of credit hours they can be expected to carry during the summer, fall, and spring of Fiscal Year 1980 - 1981. The first table is a collegewide summary of the three terms showing the students who can be expected to enroll on campus in 12 or more credit hours or 11 or fewer credit hours, and those students who will be enrolled in classes at extension centers during Fiscal Year 1981.

TABLE V-1

TENTATIVE ENROLLMENT PROJECTIONS
FISCAL YEAR 1980-81
COLLEGE CREDIT PROGRAM
TOTAL COLLEGE

Semester	TOTAL ON CAMPUS* 12 hrs. or more	11 hrs. or less	Total	FTE	OFF CAMPUS 11 hrs. or less	FTE	TOTAL COLLEGE 12 hrs. or more	11 hrs. or less	Total	FTE
Summer 80										
Student Enrollment	-	4,550	4,550	558	250	25	-	4,800	4,800	583
Credit Hours	-	16,750	16,750		750		-	17,500	17,500	
Fall 80										
Student Enrollment	6,110	10,015	16,125	4,616	775	86	6,110	10,790	16,900	4,702
Credit Hours	86,485	51,985	138,470		2,595		86,485	54,580	141,065	
Spring 81										
Student Enrollment	5,910	9,650	15,570	4,342	655	66	5,910	10,315	16,225	4,409
Credit Hours	82,965	47,325	130,290		1 990		82,965	49,315	132,280	
Total Fiscal Year										
Credit Hours			285,510	9,517	5,335	177			290,845	9,694

NOTE: FTE = 30 credit hours
*Includes College of the Air.

TABLE V-2

TENTATIVE ENROLLMENT PROJECTIONS

FISCAL YEAR 1980-81

COLLEGE CREDIT PROGRAMS
ROCKVILLE CAMPUS

Semester	12 hrs. or more	11 hrs. or less	Total	FTE
Summer 80				
Student Enrollment	-	3,485	3,485	426
Credit Hours	-	12,785	12,785	
Fall 80				
Student Enrollment	4,580	6,870	11,450	3,371
Credit Hours	65,000	36,130	101,130	
Spring 81				
Student Enrollment	4,400	6,590	10,990	3,140
Credit Hours	61,820	32,390	94,210	
Total Fiscal Year				
Credit Hours			208,125	6,937

TABLE V-3

TENTATIVE ENROLLMENT PROJECTIONS

FISCAL YEAR 1980-81

COLLEGE CREDIT PROGRAMS
ROCKVILLE OFF CAMPUS

Semester	12 hrs. or more	11 hrs. or less	Total	FTE
Summer 80				
Student Enrollment	-	125	125	12
Credit Hours	-	375	375	
Fall 80				
Student Enrollment	-	420	420	51
Credit Hours	-	1,515	1,515	
Spring 81				
Student Enrollment	-	360	360	39
Credit Hours	-	1,155	1,155	
Total Fiscal Year				
Credit Hours			3,045	102

TABLE V-4

TENTATIVE ENROLLMENT PROJECTIONS

FISCAL YEAR 1980-81

COLLEGE CREDIT PROGRAMS
TAKOMA PARK CAMPUS

Semester	12 hrs. or more	11 hrs. or less	Total	FTE
Summer 80				
Student Enrollment	-	1,065	1,065	132
Credit Hours	-	3,965	3,965	
Fall 80				
Student Enrollment	1,190	1,785*	2,975*	898*
Credit Hours	16,585	10,355*	26,940*	
Spring 80				
Student Enrollment	1,180	1,770*	2,950*	871*
Credit Hours	16,445	9,685*	26,130*	
Total Fiscal Year				
Credit Hours			57,035	1,901

*Includes 50 students, 150 credit hours and 5 FTE enrolled in College of the Air, revenue not part of operating budget.

TABLE V-5

TENTATIVE ENROLLMENT PROJECTIONS

FISCAL YEAR 1980-81

COLLEGE CREDIT PROGRAMS
TAKOMA PARK OFF CAMPUS

Semester	12 hrs. or more	11 hrs. or less	Total	FTE
Summer 80				
Student Enrollment	-	125	125	12
Credit Hours	-	375	375	
Fall 80				
Student Enrollment	-	210	210	21
Credit Hours	-	620	620	
Spring 81				
Student Enrollment	-	165	165	15
Credit Hours	-	445	445	
Total Fiscal Year				
Credit Hours			1,440	48

TABLE V-6

TENTATIVE ENROLLMENT PROJECTIONS

FISCAL YEAR 1980-81

COLLEGE CREDIT PROGRAMS
GERMANTOWN CAMPUS

Semester	12 hrs. or more	11 hrs. or less	Total	FTE
Summer 80				
Student Enrollment	-	-	-	-
Credit Hours	-	-	-	-
Fall 80				
Student Enrollment	340	1,360	1,700	346
Credit Hours	4,900	5,500	10,400	
Spring 81				
Student Enrollment	330	1,300	1,630	332
Credit Hours	4,700	5,250	9,950	
Total Fiscal Year				
Credit Hours			20,350	678

TABLE V-7

TENTATIVE ENROLLMENT PROJECTIONS

FISCAL YEAR 1980-81

COLLEGE CREDIT PROGRAMS
GERMANTOWN OFF CAMPUS

Semester	12 hrs. or more	11 hrs. or less	Total	FTE
Summer 80				
Student Enrollment	-	-	-	
Credit Hours	-	-	-	
Fall 80				
Student Enrollment	-	145	145	15
Credit Hours	-	460	460	
Spring 80				
Student Enrollment	-	130	130	13
Credit Hours	-	390	390	
Total Fiscal Year				
Credit Hours			850	28

CHAPTER VI

NON-CREDIT OR CREDIT-FREE ENROLLMENTS

The Community Services program of the College includes a wide variety of project activities and services in support of the mission of Montgomery College.

Throughout the eleven-year history of the program, Community Services has been concerned with the development of non-credit or credit-free short courses, both on and off-campus for the community.

The activities of the staff of Community Services to provide educational experiences in a non-credit or short-course format is demonstrated most clearly by the enrollments in course activities, the variety of courses offered, and the numerous locations used in the overall program.

At its establishment in the summer of 1967, Community Services commenced with three sections of Basic Real Estate Principles for Salesmen offered throughout the year at one site with approximately 120 individuals in attendance. The developments from that time in growth of courses, number of locations, and overall enrollments over the next ten years have been dramatic (Table VI-1).

From one real estate course in 1967, a complete array of 15 courses in real estate continuing education has evolved. In addition, other career-related and vocational courses have been offered in apprenticeship program for Maintenance and Machine Tool Trade, construction, graphic arts, Chartered Life Underwriters insurance courses, a property and casualty insurance licensure course, dental auxiliary courses, a variety of health care courses to help individuals in that profession to gain new skills and refresh others, secretarial, and small business management courses.

Courses of more general interest have not been neglected and range from art, photography, gardening, and home-related courses to personal finance and development, relating to others, etc. Courses in the program are conducted in response to community needs and interests as evidenced by inquiries and survey responses.

Program sites shift in response to community interest, availability, and unique attributes appropriate to the courses. The patterns of sites that occurred during the last year of programming are depicted on maps. Figure H shows the locations that were used one or more times throughout the period July 1979 to June 1980 and includes 40 different locations in Montgomery County. The remaining locations to which reference is made in Table VI-1 are Gallaudet College and U.S. Department of Transportation.

Initially, programming of non-credit courses was cycled in two or three time periods a year. As the program grew, four fixed terms per year were established (fall, winter, spring, summer) with most of the courses beginning in the first two weeks of each of these terms. The program in the last three years has expanded and

FIGURE H

LOCATIONS OF COMMUNITY SERVICES
NON-CREDIT COURSES 1979-1980

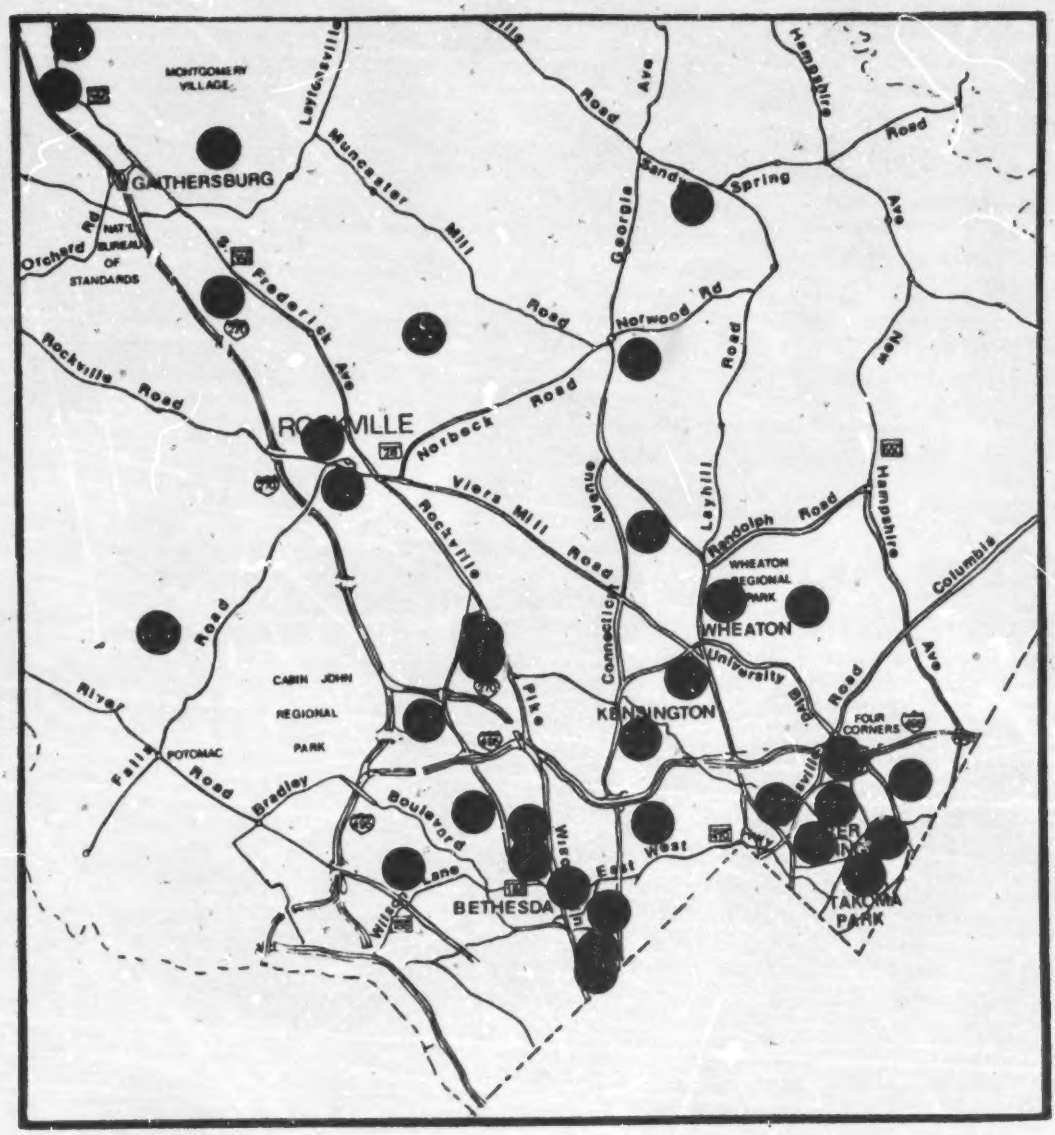


TABLE VI-1

COMMUNITY SERVICES COURSES, ENROLLMENTS AND LOCATIONS
FY 1969 - 1979

YEAR	COURSES/SECTIONS	ENROLLMENT	LOCATIONS
1968-69	33	1,003	1
1969-70	38	1,461	4
1970-71	122	3,966	7
1971-72	180	6,849	13
1972-73	291	9,006	20
1973-74	413	8,395	27
1974-75	437	8,409	30
1975-76	551	10,531	54
1976-77	648	11,566	37
1977-78	652	11,520	34
1978-79	689	12,187	40

activities have been conducted under different patterns. Programs, while still concentrated in the four terms noted above, were initiated on a variety of dates throughout the year. During FY 1979 one or more courses serving 15 or more persons was iniated on 160 different days of the year. Programming schedules for fiscal year 1979-80 indicate that a similar level of beginning dates will also occur. This more flexible approach to serving the community has brought about an almost continuous programming and registration activity in the Community Services Office.

The projections presented in Table VI-2 and Figure I are based on historical trends in the growth of the non-credit program and expectations for future growth in this educational sector. During coming years, Community Services expects to undergo further expansion into new areas of the County.

FIGURE I
ACTUAL AND PROJECTED STUDENTS
IN EQUATED CREDIT COURSES

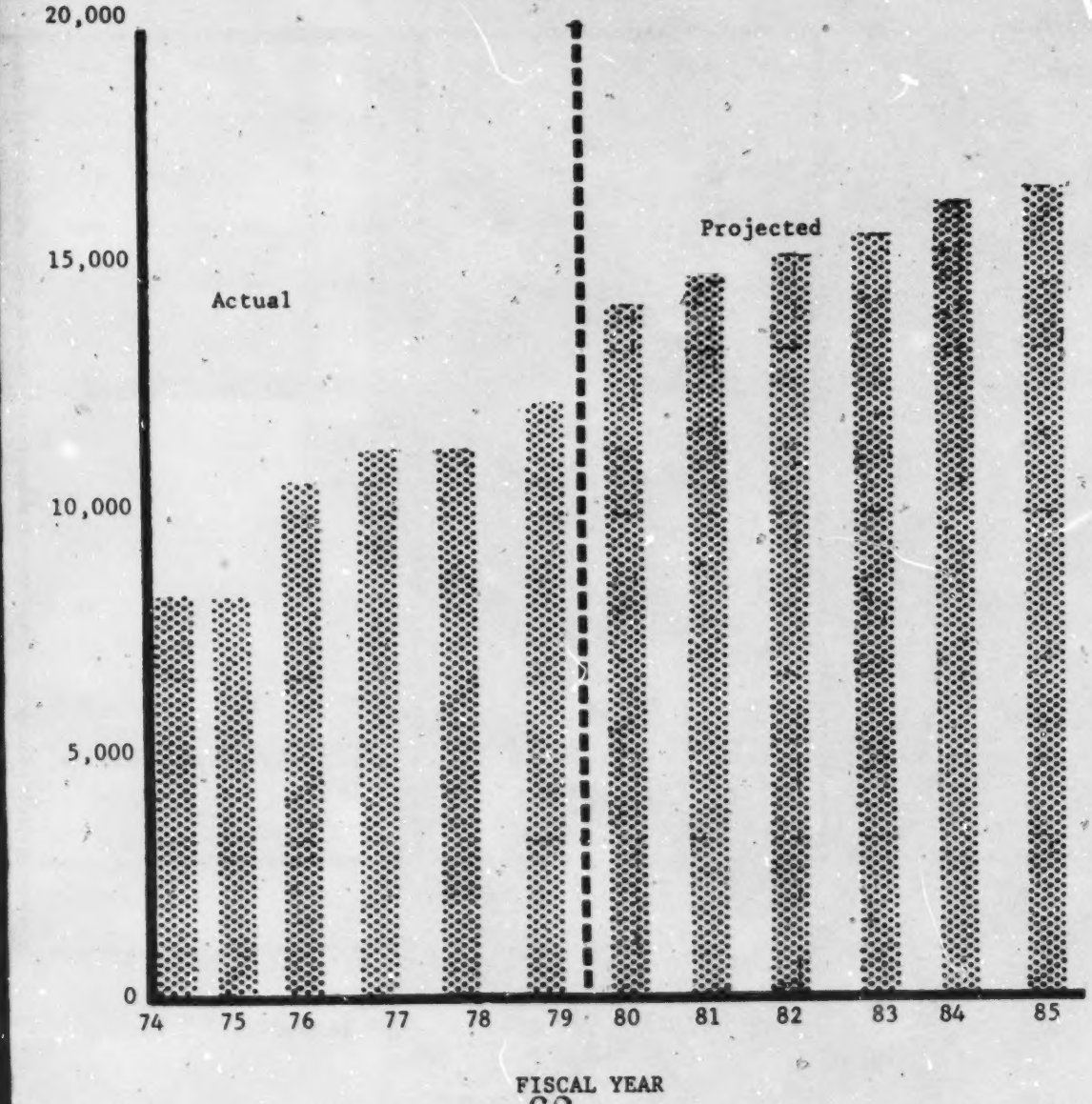


TABLE VI-2
NON CREDIT
COMMUNITY SERVICES
HEADCOUNT AND FULL-TIME EQUIVALENT STUDENTS*
IN EQUATED-CREDIT COURSES
ACTUAL FIVE YEARS - PROJECTED SIX YEARS

			FULL-TIME EQUIVALENT STUDENTS RESIDENCE									
			TOTAL IN STATE			MONTGOMERY COUNTY			STATE			NON-RESIDENT
Fiscal Year	Total Headcount Enrollment	Total FTE	Funded	Non-Funded	Total FTE	Funded	Non-Funded	Total FTE	Funded	Non-Funded	Total FTE	FTE Non-Funded
1974	8,395	403	310	73	383	278	68	346	32	5	37	20
1975	8,409	400	299	86	385	280	83	363	19	3	22	15
1976	10,531	476	348	108	456	327	105	432	21	3	24	20
1977	11,566	633	474	130	604	440	127	567	34	3	37	29
1978	11,520	627	433	155	588	403	151	554	30	4	34	39
1979	12,187	678	508	125	633	466	121	587	42	4	46	45
					PROJECTED							
1980	14,000	795	580	182	762	539	179	718	41	3	44	33
1981	14,500	840	625	182	807	583	179	762	42	3	45	33
1982	15,000	886	646	206	852	604	203	807	42	3	45	34
1983	15,500	933	681	218	899	638	215	853	43	3	46	34
1984	16,000	981	716	231	947	673	228	901	43	3	46	34
1985	16,350	1,031	763	233	996	719	230	949	44	3	47	35

*One FTE is equal to 30 equated credit hours of instruction.

CHAPTER VII

SUMMARY OF FISCAL YEAR FTE ENROLLMENTS CREDIT AND NON-CREDIT COMBINED

College revenues are calculated primarily on the basis of Full-Time Equivalent Students (FTES). Table VII-1 presents the FTES for Montgomery College for the next five years.

TABLE VII-1

TOTAL FULL-TIME EQUIVALENT STUDENTS FY 1975 - FY 1985*

FISCAL YEAR	ACTUAL					PROJECTED					
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Credit											
State funded	7702	8285	8159	8280	8079	8483**	8637	8744	8810	8852	8887
Non-funded	801	690	723	843	975	1044**	1057	1070	1080	1085	1090
TOTAL	8503	8975	8882	9123	9054	9527**	9694	9815	9890	9937	9977
Non-Credit											
State funded	299	348	474	433	508	580	625	646	681	716	763
Non-funded	101	128	159	194	170	215	215	240	252	265	268
TOTAL	400	476	633	627	678	795	840	886	933	981	1031
Overall											
State funded	8001	8633	8633	8713	8587	9063	9262	9390	9491	9568	9650
Non-funded	902	818	882	1037	1145	1259	1272	1310	1332	1350	1358
GRAND TOTAL	8903	9451	9515	9750	9732	10322	10534	10700	10823	10918	11008

*FTES = 30 credit or equated credit hours of instruction.

**Includes actual enrollments for summer session and fall semester.

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